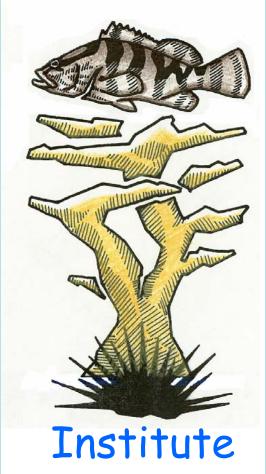


CARIBBEAN CORAL REEF INSTITUTE



Co-operative Program:

University of Puerto Rico – Mayagüez

NOAA, Center for Sponsored Coastal Ocean Research

Research Needs

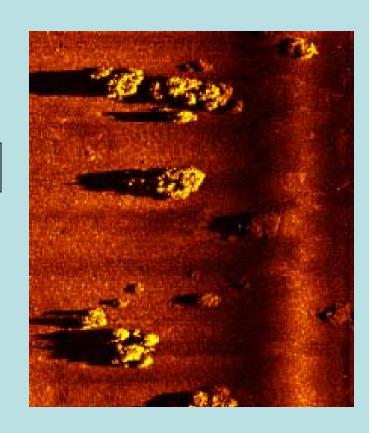
Development of New Techniques & Approaches

Basic & Applied Science



Management

Monitoring & Management Assessment





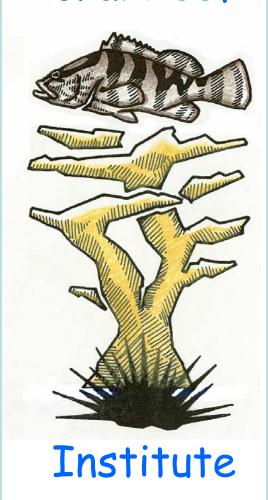
CCRI as an Approach to Research

- Modeled after Hawaiian Coral Reef
 Initiative
- Develop, implement, and administer research and monitoring activities
- Interact with government agencies, public and private organizations
- Utilize fully the resource base of the region to collaborate and conduct research



Structure of CCRI

- Permanent Staff
 Executive Director
 Program Manager
 Assistant Manager
- Management Committee
- Technical Advisory Committee



Management Committee

- •Establish priorities for research and associated activities.
- •Issue requests for competitive, peer-reviewed proposals.
- Approve projects for inclusion in the Institute.
- Review research and monitoring results



Current Research

Funded through 2 grants

10 Projects

3 Areas

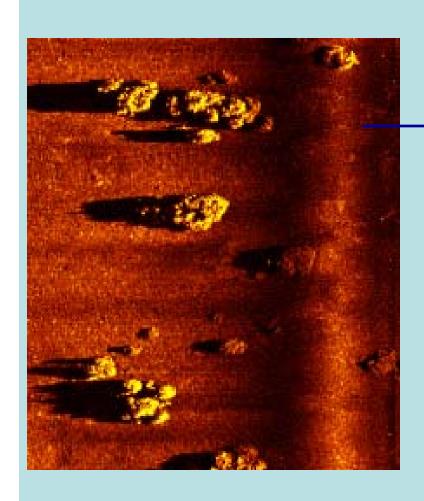
- Basic Resources Assessment
- MPA Design
- Reef Processes

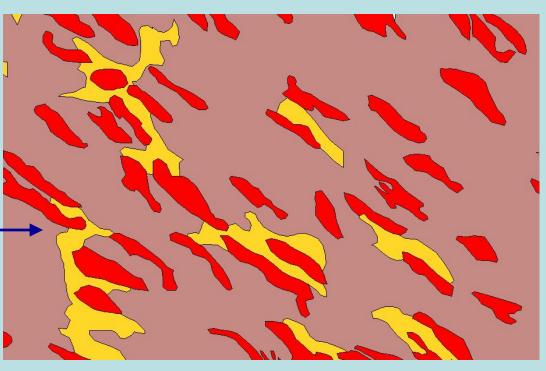
Resources Assessment

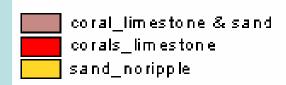


Habitat Mapping

Resources Assessment







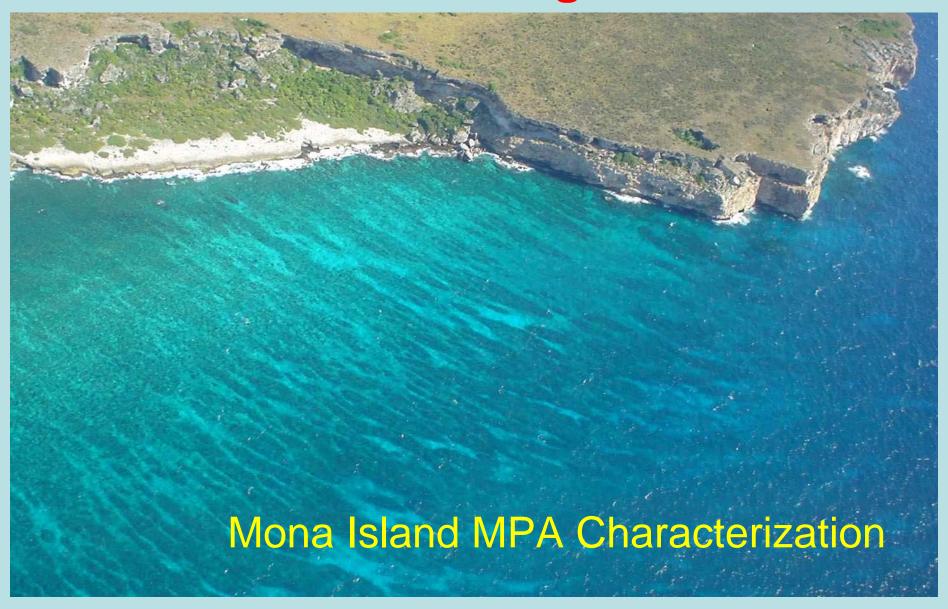
Resources Assessment

Ornamental Fisheries Phase II:





MPA Design



MPA Design

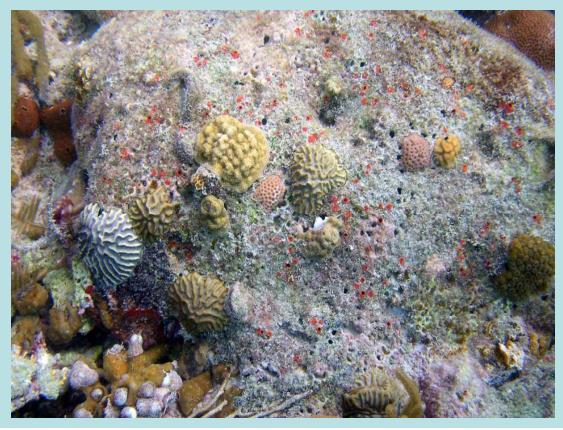


MPA Design

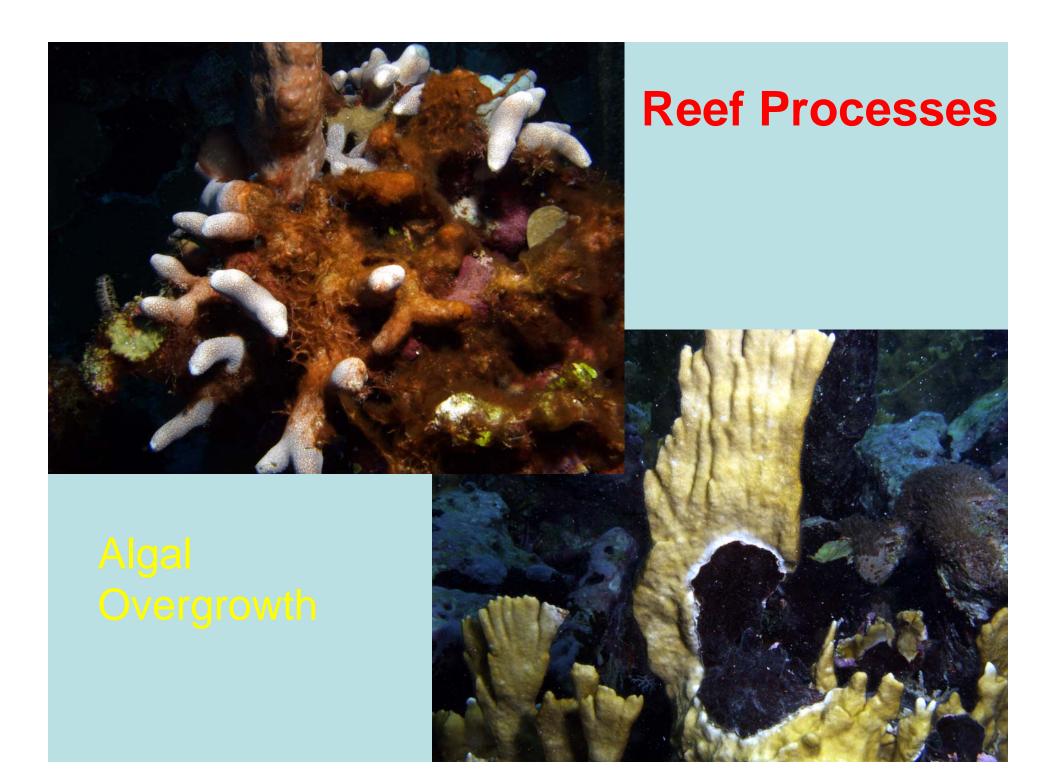


Reef Processes

Coral Recruitment







North Atlantic Ocean SAN JUAN Arecibo Aguadilla Isla de Culebra Bayamón* *Carolina Deseches Fajardo Mona Puerto Rico *Caguas .Mayagüez Passage Isla de Vieques Guayanilla Guánica Ponce Isla Guayama Mona Caribbean 0 10 20 km 10 20 mi

Reef Processes







Infrastructure Improvement

CREWS Station Enhancement

Pulse Amplitude Modulated (PAM) Fluorometer

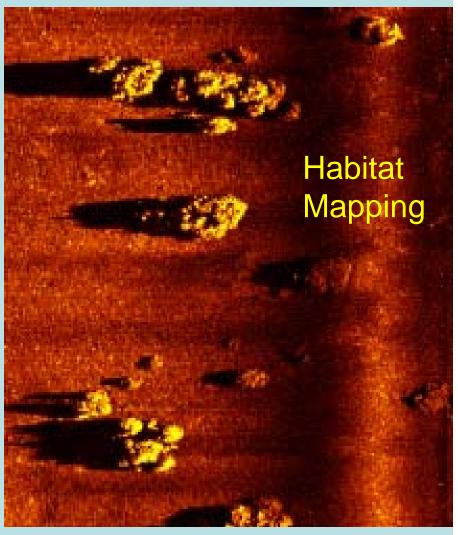
Biospherical light sensors (three bands of UV plus PAR)

CTD

CCRI Phase II

- •3 Year Program
- First year:





CCRI Phase II

First year:

Cross-shelf Sedimentation Patterns and Processes

Based on CRES Samples

Extent of terriginous transport Integrate with CRES studies

Methods:

Grain size

Carbon

Mineralogogy/Trace metals



Years 2 and 3: RFP Process

In conjunction with CMRC

Over 70 experts polled:

NGO's (6)

Academia + UPR SGCP & WRRI Local Agencies - DNER, EQB, Planning Board Federal Agencies - EPA, USGS, FWS, NMFS, CFMC

First Quarterly Meeting

5 Focal Areas





Years 2 and 3: RFP Process

Focal Areas

- Basic assessment of resources
- Understanding reef processes
- Research to enhance the MPA process
- Water quality and coral reef health
- Dynamics of coral diseases and syndromes



Institute

Outreach

Goal: Communicate Results to Managers, Stakeholders, Scientists

- •DNER as Co-Chair ⇒ CR Advisory Comm.
- Open & Announced "Quarterly" Meetings
- Research Applications in Final Reports
- Brochures on Research Results
- •CCRI Web Site
- Links to Other Forums